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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|---------------------------|---------------------|------------------|
| 09/513,518 | 02/25/2000 | Cedell Adam Alexander JR. | RAL9-99-0073 | 7208 |
| 25299 | 7590 | 07/26/2004 | EXAMINER | |
| IBM CORPORATION PO BOX 12195 DEPT 9CCA, BLDG 002 RESEARCH TRIANGLE PARK, NC 27709 | | | PHILPOTT, JUSTIN M. | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2665 | 12 |

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/513,518

Applicant(s)

ALEXANDER ET AL.

Examiner

Justin M Philpott

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. In view of the Appeal Brief filed on May 20, 2004, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 35-38, 43-46, 51-54, 56-59 and 61-64 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,516,355 to Hartmann et al.

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Regarding claims 35, 43, 51, 56 and 61, Hartmann teaches a network switch comprising: a CPU (e.g., switching engine 100 in FIG. 4, see also col. 5, lines 7-11 regarding switching engine performing read and write operations); a memory system (e.g., configuration files 108) having circuitry operable to attach to the CPU (e.g., see FIG. 4, wherein 108 is coupled to 100); a switch fabric system (e.g., switching matrix 102, see col. 5, lines 35-36 regarding switching matrix) having circuitry operable to attach to the CPU (e.g., see FIG. 4, wherein 102 is coupled to 100); a port controller (e.g., one of switch message interface 118 and switch OA&M 128) having circuitry operable to attach to the switch fabric system (e.g., see FIG. 4, wherein 118 and 128 are coupled to 102, see also col. 5, lines 35-36 and 57-59); a software application (e.g. one of translators 110, 112, 114), operable to execute on the CPU (e.g., see FIG. 4, wherein 110/112/114 execute on 100); a Forwarding Database Distribution Library FDDL system (e.g., object server 124 comprising database management library, see col. 488, lines 24-25) operable to execute on the CPU (e.g., see FIG. 4, wherein 124 executes on 100); and a switch device driver (e.g., one of transaction managers 116 and 126) operable to execute on the CPU (e.g., see FIG. 4, wherein 116 and 126 execute on 100), wherein the software application (e.g., 110/112/114) is operable to communicate with the FDDL system (e.g., object server 124 comprising database management library, see FIG. 4 wherein 110/112/114 is coupled to 124 via 120), the FDDL system (e.g., object server 124 comprising database management library) is operable to communicate with the switch device driver (e.g., 116/126, see FIG. 4), and the switch device driver (e.g., 116/126) is operable to communicate with the switch fabric (e.g., 102 via interface 118/128, see FIG. 4).

Further, regarding claim 43, Hartmann teaches the software application (e.g., one of translators 110, 112, 114) comprises protocol means (e.g., see col. 5, lines 15-27).

Further, regarding claims 51 and 56, Hartmann teaches the port controller (e.g., 128) receives information in a first protocol (e.g., generic messaging protocol, see col. 3, line 45 – col. 4, line 65 and col. 5, lines 11-40) from a first node machine (e.g., from interface 106 via 124 and 126, see bidirectional communication arrows in FIG. 4), communicating the information from the port controller (e.g., 128) to the switch fabric (e.g., 102, see bidirectional communication arrows in FIG. 4), communicating the information from the switch fabric (e.g., 102) to the switch device driver (e.g., transaction manager 126, see bidirectional communication arrows in FIG. 4) within an operating system, communicating the information from the switch device driver (e.g., 126) to the FDDL (e.g., at 124, see bidirectional communication arrows in FIG. 4), and communicating the information from the FDDL (e.g., at 124) to a first protocol client (e.g., at 106, see bidirectional communication arrows in FIG. 4).

Further, regarding claim 61, Hartmann teaches a workstation (e.g., host computer, see col. 3, lines 52-55, wherein the host computer is inherently a man-machine interface 106) logically connected to a backbone (e.g., coupling between 106 and 100, see FIG. 4) which is logically connected to the port controller (e.g., 118/128, see FIG. 4).

Regarding claims 36, 44, 52, 57 and 62, Hartmann teaches a second software application and/or second protocol means communicates with the FDDL system (e.g., second of one of 110, 112, 114), wherein communications are inherently in a second protocol (e.g., see col. 3, line 35 – col. 4, line 20).

Regarding claims 37, 38, 45, 46, 53, 54, 58, 59, 63 and 64, Hartmann teaches the FDDL system defines an FDDL API and Switch Services API for communication with the switch device driver (e.g., see col. 3, line 1 – col. 5, line 40, and also see FIG. 4, wherein the software application 110/112/114 comprises API and the switch device driver inherently comprises API by its coupling to 110/112/114).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 39-42, 47-50, 55, 60 and 65-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartmann.

Regarding claims 39, 47, 55, 60 and 65, Hartmann teaches the network switch discussed above regarding claims 36, 44, 52, 57 and 62, however, Hartmann may not specifically disclose the FDDL system (e.g., object server 124 comprising database management library, see col. 488, lines 24-25) comprises, specifically, a “base” configuration and the first and second software applications (e.g., one of translators 110, 112, 114) comprise, specifically, “tower” configurations. However, Examiner takes official notice that “base” and “tower” configurations are configurations well known in the art of network switching. Accordingly, at the time of the invention it would have been obvious to one of ordinary skill in the art to utilize a “base” configuration for the FDDL system of Hartmann and a “tower” configuration for the first and second software

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applications of Hartmann since such configurations are well known in the art of network switching.

Regarding claims 40-42, 48-50 and 66-68, Hartmann further teaches an independent software application (e.g., one of 110, 112, 114, see FIG. 4) and independent software application shim (e.g., logical device management 120 coupled to software 110/112/114, see col. 5, lines 11-40) are operable to execute on the CPU (e.g., 100), wherein the independent software application (e.g., one of 110/112/114) communicates with the independent software application shim (e.g., 120), and the independent software application shim (e.g., 120) communicates with the switch device driver (e.g., 116, see FIG. 4).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M Philpott whose telephone number is 703.305.7357. The examiner can normally be reached on M-F, 9:00am-5:00pm.

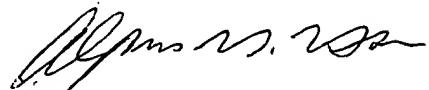
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on 703.308.6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Justin M Philpott



ALPUS H. HSU
PRIMARY EXAMINER